

M S D S***Material Safety Data Sheet***

24 HOUR EMERGENCY TELEPHONE NUMBER CALL CHEMTREC 1-800-424-9300
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Ammonium Hydroxide, 28%

Section I: PRODUCT IDENTIFICATION

Name: 28% Ammonium Hydroxide

Azer Scientific Product Number: ES645-16

Product Description: Ammonium Hydroxide Solution

Cas No: 1336-21-6

Section II: HAZARDOUS INGREDIENTS / EXPOSURE LIMITS

Component(s):	CAS Number	OHSA PEL, ACGIH TLV/STEL	
Ammonium Hydroxide 28% (Corrosive Liquid)	1336-21-6	50,	25/35 ppm

NFPA	Health	3
	Flammability	1
	Reactivity	0

Section III: PHYSICAL / CHEMICAL COMPOSITION

<i>Boiling Point:</i>	~83°F	<i>Specific Gravity (H₂O = 1):</i>	0.9
<i>Vapor Pressure mm Hg/20°C:</i>	720	<i>Percent Volatile by Vol:</i>	NA
<i>Vapor Density (Air 1:1):</i>	1.2	<i>Evaporation Rate (ether = 1):</i>	NA
<i>Solubility in H₂O:</i>	Complete	<i>Appearance & Odor:</i>	Clear Liquid/ Pungent Odor

Section IV: FIRE/EXPLOSION HAZARD DATA

Flash Point: Non-flammable *Flammable Limits:* LEL: NA UEL: NA

Extinguishing Media: Water Spray

Special Fire Fighting Procedures: Wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in a fire situation. Do not use direct water stream.

Unusual Fire & Explosion Hazards: May emit toxic fumes. Closed container may explode in heat of fire

Section V: REACTIVITY DATA

Stability: Stable.

Material to Avoid: Strong acids, bleaches, halogens

Hazardous Decomposition or Byproducts: Ammonia fumes.

Hazardous Polymerization: Does not occur.

Conditions to Avoid: Excessive heat.

Section VI: HEALTH HAZARD DATA

NOTE: Product is corrosive.

Routes of Entry: Inhalation, Skin and Ingestion

Target Organs: Eyes, skin, respiratory and gastrointestinal tracts..

Acute/Chronic: Vapors will cause eyes, skin and respiratory irritation and burning. Will cause burning to eyes, skin and intestinal tract, gastrointestinal disturbances, convulsions, circulatory problems, and respiratory system

Carcinogenicity: Not classified as a human carcinogen.

Signs/Symptoms of Exposure: Burning eyes, skin/tissue destruction and respiratory irritation.

******* Emergency First Aid *******

Skin: Remove contaminated clothing. Wash affected skin area with soap and water.

Eyes: Thoroughly flush eyes with water. Contact a physician if irritation persists.

Ingestion: Rinse mouth thoroughly with water, provided person is conscious and contact a physician.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration and contact physician.

Section VII: SAFE HANDLING

Chemical Release or Spill: Wear protective gear and isolate the spill area with sand, or other absorbent material. Place all contaminated material in a closed container for disposal. Minimize spill with water

Waste Disposal Method: All liquid and or contaminated material should be disposed of in DOT approved waste containers. Comply with all Federal, State and Local regulations for disposal.

Precautions for Handling and Storing: Use normal precautions for corrosive liquids. Avoid excessive heat.

Section VIII: CONTROL MEASURES

Respiratory Protection: Required if used in a non-ventilated area.

Ventilation: Mechanical or General exhaust is sufficient

Protective Gloves: Chemical resistant.

Eye Protection: Safety glasses.

Other Protective Clothing or Equipment: Normal laboratory apparel suggested by Good Laboratory Practices.

Work/Hygienic Practices: Wash thoroughly with soap and water after handling.

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